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- Maitak, G. P. Anomalous atomic weights in the D. I. Mendeleev periodic system, 1965.
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- Markov, B. F., and I. D. Panchenko. Phase diagrams of the binary systems magnesium chloride-alkali metal chlorides, 1987.
- Markova, Yu. V., L. N. Zenkova and M. N. Shchikina. A new synthesis method of C¹⁴ labeled p-aminobenzoic acid and preparation of the C¹⁴ labeled anesthetics anesthine, novocaine and cocaine, 1329.
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- Stepanov, F. N., and Z. Z. Moiseeva. 4-Keto-thiazoles (4-hydroxythiazoles). II. Reactions of the methylene group of 2-phenylthiazolone-4, 1923.
- Stepanov, F. N., and N. I. Shirokova. Chlorination of saturated nitriles, 905.
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- Strukov, I. T. Letter to the editor. Correction to paper, "Mechanism of the reaction of formation of oxazolones substituted in the 2-position. J. Gen. Chem., 23, 438 (1953), 2435.
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- Terentyev, A. P., A. N. Kost and V. A. Smit. Syntheses with the help of acrylonitrile. XXI. Synthesis and properties of N-indolylpropionic acids, 1905.
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- Uspenskaya, L. N., N. P. Glushkova and A. G. Bergman. Reciprocal solubility of salts in the system of the chlorides and nitrates of barium and calcium from temperatures of complete solidification to +60°, 1617.
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- Yunusov, S. Yu., and S. T. Akramov. Investigation of the alkaloids of the seeds of *Lolium Cuneatum* (Nevski), 1765.
- Yunusov, S. Yu., and G. P. Sidiyakin. Alkaloids of the species *Haplophyllum* A. Juss. II., 1959.
- Yurkevich, A. M., see Kost, A. N.
- Yuryev, Yu. K., and L. S. German. Catalytic transformations of ethylene sulfide and ethanedithiol, 2421.
- Yuryev, Yu. K., L. I. Khmel'nitsky and E. G. Treshchova. Reaction of butyl alcohol with carbon dioxide in the presence of chromic oxide on aluminum oxide, 555.
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- Zakharova, A. I., and G. M. Murashov. Synthesis of branched diacetylene hydrocarbons. Production of 2,2,5,5,8,8-hexamethyl-nonadiyne-3,6, 1397.
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